# LIST OF U.S. CUSTOMS LABORATORY METHODS

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| 39-01 | ASTM D 5292 | Test Method for Aromatic Hydrogen and Aromatic Carbon Contents of Hydrocarbon Oils by High Resolution Nuclear Magnetic Resonance Spectroscopy |
| 39-02 | ASTM D 3168 | Practice for Qualitative Identification of Polymers in Emulsion Paints |
| 39-03 | ASTM D 4128 | Practice for Identification of Organic Compounds in Water by Combined Gas Chromatography and Electron Impact Mass Spectrometry |
| 39-04 | ASTM E 260 | Practice for Packed Column Gas Chromatography |
| 39-05 | ASTM E 1510 | Practice for Installing Fused Silica Open Tubular Capillary Columns in Gas Chromatographs |
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| 39-10 | ASTM D 792 | Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement |
| 39-11 | ASTM D 5594 | Test Method for Determination of the Vinyl Acetate Content of Ethylene-Vinyl Acetate (EVA) Copolymers by Fourier Transform Infrared Spectroscopy (FT-IR) |
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| 39-18 | ASTM D 644 | Test Method of Moisture Content of Paper and Paperboard by Oven Drying |
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| 39-26 | USCL Manual | Medical Devices: Patient Examination and Surgeons' Gloves; Adulteration Federal Register 55,(239) 51254-51258 |

| USCL NUMBER | METHOD | TITLE |
|---|---|---|

| | | |
|---|---|---|
| 39-27 | USCL Manual | **Recommended Guidelines for the Analysis of HTSUS Section VII Materials** |
| 39-28 | ASTM D 1259 - 1994 **NHM - 1994** | **Test Methods for Nonvolatile Content of Resin Solutions** |

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-01 Index

# ASTM D 5292
# Test Method for Aromatic Hydrogen and Aromatic Carbon Contents of Hydrocarbon Oils by High Resolution Nuclear Magnetic Resonance Spectroscopy

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

This method covers the determination of the aromatic hydrogen content and aromatic carbon content of hydrocarbon oils using high-resolution nuclear magnetic resonance (NMR) spectrometers. The methodology is applicable in Chapter 39 of the Harmonized Tariff Schedule of the United States (HTSUS) to polymers that are completely soluble at ambient temperature, although the method is directly applicable to hydrocarbon oils of Chapter 27.

### 2 REFERENCES

***ASTM D 5292***
Test Method for Armatic Hydrogen and Aromatic Carbon Cointenets of Hydrocarbon Oils by High Resolution Nuclear Magnetic Resonance Spectroscopy

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-02 Index

# ASTM D 3168
# Practice for Qualitative Identification of Polymers in Emulsion Paints

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

This method describes a procedure for the qualitative identification in emulsion paints of most types of polymers present as major components of the paint vehicle. The methodology will be useful in the general identification of polymers covered in Chapter 39 of the Harmonized Tariff Schedule of the United States (HTSUS) although the method is directly applicable in Chapter 32 HTSUS.

### 2 REFERENCES

***ASTM D 3168***
Practice for Qualitative Identification of Polymers in Emulsion Paints

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-03

Index

# ASTM D 4128
# Practice for Identification of Organic Compounds in Water by Combined Gas Chromatography and Electron Impact Mass Spectrometry

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

This method describes the standard practice and procedures for using packed or capillary gas chromatographic columns to identify volatile and semi-volatile organic and inorganic compounds in either aqueous or organic solvent matrices by gas chromatography/mass spectrometry (GC/MS) (electron impact). This method is meant to provide guidelines as appropriate in the analysis of commodities of the Harmonized Tariff Schedule of the United States (HTSUS).

### 2 REFERENCES

***ASTM D 4128***
Practice for Identification of Organic Compounds in Water by Combined Gas Chromatography and Electron Impact Mass Spectrometry

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-04 Index

# ASTM E 260
# Practice for Packed Column Gas Chromatography

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

This method describes the standard practice and procedures for the manufacture, evaluation and use of packed gas chromatographic columns for the separation and qualitative/quantitative analysis of volatile and semi-volatile organic and inorganic compounds using gas chromatography (GC).

### 2 REFERENCES

***ASTM E 260***
Practice for Packed Column Gas Chromatography

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-05

Index

# ASTM E 1510
# Practice for Installing Fused Silica Open Tubular Capillary Columns in Gas Chromatographs

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

This method describes the standard practice and procedures for the installation, evaluation, maintenance and use of fused silica open tubular capillary gas chromatographic columns for the separation and qualitative/quantitative analysis of volatile and semi-volatile organic and inorganic compounds using capillary gas chromatography (GC).

### 2 REFERENCES

***ASTM E 1510***
Practice for Installing Fused Silica Open Tubular Capillary Columns in Gas Chromatographs

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-06

Index

# ASTM D 2621
# Test Method for Infrared Identification of Vechicle Solids from Solvent-Reducible Paints

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

Duplicate: See USCL 32-07

## 2 REFERENCES

***ASTM D 2621***
Test Method for Infrared Identification of Vehicle Solids from Solvent-Reducible Paints

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-07

Index

# ASTM D 2008
# Test Method for Ultraviolet Absorbance and Absorptivity of Petroleum Products

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

**1.1** This method describes general practice and procedure for the use of ultraviolet spectroscopy in the identification of solid or liquid petroleum-derived analytes in a solvent medium.

**1.2** This method may be used in general applications involving the use of ultraviolet spectroscopy for the qualitative and/or quantitative identification of solid or liquid analytes in a solvent medium.

### 2 REFERENCES

***ASTM D 2008***
Test Method for Ultraviolet Absorbance and Absorptivity of Petroleum Products

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-08

Index

# ASTM D 2703
# Practice for Rubber Chemicals - Determination of Ultraviolet Absorbance Characteristics

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

**1.1** This method describes general practice and procedures for the use of ultraviolet spectroscopy in the characterization of chemicals used in the rubber industry.

**1.2** This method may be used for general application of ultraviolet spectroscopy for the qualitative and/or quantitative identification of solid and/or liquid analytes in a solvent medium.

### 2 REFERENCES

***ASTM D 2703***
Practice for Rubber Chemicals - Determination of Ultraviolet Absorbance Characteristics

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-09 Index

# ASTM D 275
# Practice for Describing and Measuring Performance of Ultraviolet, Visible, and Near Infrared Spectrophotometers

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

This practice covers the description of requirements of spectrophotometric performance especially for ASTM methods, and the testing of the adequacy of available equipment for a specific method. The test covers such items as the wavelength accuracy and precision, the selection of slit width, and a measurement procedure for establishing photometric precision and linearity.

### 2 REFERENCES

***ASTM D 275***
Practice for Describing and measuring Performance of Ultraviolet, Visible, and Near Infrared Spectrophotometers

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-10

Index

# ASTM D 792
# Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

**1.1** This method describes general practice and procedure for the determination of the specific gravity in various plastics materials using displacement.

**1.2** This method may be used in the determination of plastics materials which can become wet with water but, otherwise, not affected by water.

**1.3** This method may be used for the determination of specific gravity of plastics materials which are both lighter than water or heavier than water.

**1.4** This method may be used for the determination of the specific gravity of polymers of ethylene, in primary form, as described in Heading 3901 of the Harmonized Tariff Schedule of the United States (HTSUS).

### 2 REFERENCES

***ASTM D 792***
Test Methods for Density and Specific Gravity (Relative Density) of Plastics by Displacement

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-11 Index

# ASTM D 5594
# Test Method for Determination of the Vinyl Acetate Content of Ethylene-Vinyl Acetate (EVA) Copolymers by Fourier Transform Infrared Spectroscopy (FT-IR)

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

This method covers infrared procedures for determining the vinyl acetate content of ethylene-vinyl acetate (EVA) copolymers using pressed films or molded plaques and internal corrections for sample thickness. This method may be useful in determining the vinyl acetate content of EVA copolymers that fall under Heading 3905 of the Harmonized Tariff Schedule of the United States (HTSUS).

### 2 REFERENCES

***ASTM D 5594***
Test Method for Determination of the Vinyl Acetate Content of Ethylene-Vinyl Acetate (EVA) Copolymers by Fourier Transform Infrared Spectroscopy (FT-IR)

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-12

Index

# ASTM D 1248
# Specification for Polyethylene Plastics Molding and Extrusion Materials

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

This specification provides for the identification of polyethylene plastics molding and extrusion materials. The tests involved in this specification are intended to provide information for identifying materials according to the types, classes, categories and grades covered. This information may be useful in identifying polyethylene materials in Chapter 39 of the Harmonized Tariff Schedule of the United States (HTSUS).

### 2 REFERENCES

***ASTM D 1248***
Specification for Polyethylene Plastics Molding and Extrusion Materials

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-13 INDEX

## Terminology in HTSUS Section VII

**SAFETY PRECAUTION**

*This method does not purport to address all the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

**1 SCOPE AND FIELD OF APPLICATION**

This list is designed to aid in the identification of polymeric materials provided for in Chapters 39 and 40 of the Harmonized Tariff Schedule of the United States (HTSUS). The list of terms is being provided as general guidance and should not be considered exhaustive. Consult the current edition of the **Explanatory Notes to the Harmonized Commodity Description and Coding System** and the **Harmonized Tariff Schedule of the United States** for any changes.

**2 REFERENCES**

***Harmonized Tariff Schedule of the United States 1996***
United States International Trade Commission
USITC Publication 2937
U.S. Government Printing Office, Washington D.C.

***Explanatory Notes to the Harmonized Commodity Description and Coding System***
World Customs Organization
Customs Co-operation Council, 1996

**3 TERMINOLOGY**

**3.1** Elastomeric

**3.1.1** HTSUS Chapter 39: Additional U.S. Note 1

**3.1.2** For the purposes of this chapter, the term "elastomeric" means a plastics material which after cross-linking can be stretched at 20°C at least three times its original length and that after having been stretched to twice its original length and the stress removed, returns within five minutes to less than 150 percent of its original length. elastomeric plastics may also contain fillers, extenders, pigments or rubber-processing chemicals, whether or not such plastics material, after the addition of such fillers, extenders, pigments or chemicals, can meet the tests specified in the first part of this note.

**3.2** Plastics

**3.2.1** HTSUS Chapter 39: Note 1

**3.2.2**. Throughout the tariff schedule the expression "plastics" means those materials of heading 3901 to 3914 which are or have been capable, either at the moment of polymerization or at some subsequent stage, of being formed under external influence (usually heat and

pressure, if necessary with a solvent or plasticizer) by molding, casting, extruding, rolling or other process into shapes which are retained on the removal of the external influence.

Throughout the tariff schedule, any reference to "plastics" also includes vulcanized fiber. The expression, however, does not apply to materials regarded as textile materials of section XI.

**3.3** Copolymer

**3.3.1** HTSUS Chapter 39: Note 4

**3.3.2** The expression "copolymers" covers all polymers in which no single monomer contributes 95 percent or more by weight to the total polymer content.

**3.4** Primary form

**3.4.1** HTSUS Chapter 39: Note 6

**3.4.2** In headings 3901 to 3914, the expression "primary form" applies only to the following forms:

(a) Liquids and pastes, including dispersions (emulsions and suspensions) and solutions;

(b) Blocks of irregular shape, lumps, powders (including molding powders), granules, flakes and similar bulk forms.

**3.5** Prepolymer

**3.5.1** Explanatory Notes: Chapter 39:

**3.5.2** Prepolymers are products which are characterized by some repetition of monomer units although they may contain unreacted monomers. Prepolymers are not normally used as such but are intended to be transformed into higher molecular weight polymers by further polymerization.

**3.6** Bottle-grade resins

**3.6.1** HTSUS Chapter 39 Statistical Note 1

**3.6.2** For the purposes of statistical reporting number 3907.60.0010 the term "bottle-grade resins" refers to uncompounded resins having an intrinsic viscosity of at least 0.68 but not more than 0.86 deciliters per gram, as determined by ASTM D 2857-70.

**3.7** Synthetic rubber

**3.7.1** HTSUS Chapter 40 Note 4

**3.7.2** In Note 1 to this Chapter and in heading No. 40.02, the expression "synthetic rubber" applies to:

(a) Unsaturated synthetic substances which can be irreversibly transformed by vulcanization with sulphur into non-thermoplastic substances which, at a temperature between 18°C and 29°C, will not break on being extended to three times their original length and will return, after being extended to twice their original length, within a period of five minutes, to a length not greater than one and a half times their original length. For the purposes of this test, substances necessary for the cross-linking, such as vulcanizing activators or accelerators, may be added; the presence of substances as provided for by Note 5(b) (ii) and (iii) is also permitted. However, the presence of any substances not necessary for the cross-linking, such as extenders, plasticisers and fillers, is not permitted;

(b) Thioplasts (TM); and

(c) Natural rubber modified by

grafting or mixing with plastics, depolymerized natural rubber, mixtures of unsaturated synthetic substances with saturated synthetic high polymers provided that all the above-mentioned products comply with the requirements concerning vulcanization, elongation and recovery in (a) above.

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-14

Index

# ASTM D 5043
# Test Method for Field Identification of Coatings

**SAFETY PRECAUTIONS**

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

**1 SCOPE AND FIELD OF APPLICATION**

**1.1** This method describes general practice and procedure for the preliminary screening type identification of various coatings using different field tests.

**1.2** None of the test methods described herein are to be used soley for the identification of coatings; the identification of coatings is to be determined only after additional specific tests are conducted.

**1.3** This method describes burning, pyrolysis, solubility, odor and flame tests for the preliminary determination of the identity of coatings.

**1.4** This method describes procedures which can be used in general preliminary physical and chemical testing of appropriate materials.

**2 REFERENCES**

***ASTM D 5043***
Test Method for Field Identification of Coatings

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-15

Index

# ASTM D 2257
# Test Method for Extractable Matter in Textiles

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

**1.1** This method describes practice and procedure for the extraction of extractable materials from most fibers, yarns and fabrics.

**1.2** This method may be used in clean up procedures for various polymers, fibers, yarns and fabrics, including man-made fibers.

**1.3** This method may be used to separate various fiber, yarn, fabric and polymer materials into their respective components based upon different solubilities.

### 2 REFERENCES

***ASTM D 2257***
Test Method for Extractable Matter in Textiles

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-16

Index

# ASTM D 2857
# Test Method for Dilute Solution Viscosity of Polymers

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

This practice covers the determination of the dilute solution viscosity of polymers. In the Harmonized Tariff Schedule of the United States (HTSUS), Chapter 39 Statistical Note 1 states that for the purposes of statistical reporting number 3907.60.0010 the term "bottle-grade resins" refers to uncompounded resins having an intrinsic viscosity of at least 0.68 but not more than 0.85 deciliters per gram, as determined by ASTM D 2857-70. Subheading 3907.60.00.10 covers polyethylene terephthalate bottle-grade resins.

### 2 REFERENCES

***ASTM D 2857***
Test Method for Dilute Solution Viscosity of Polymers

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-17

Index

# ASTM D 40603
# Test Method for Determining Inherent Viscosity of Poly(ethylene terephthalate) (PET)

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

This method provides for the determination of the inherent viscosity of polyethylene terephthalate (PET) plastic provided for in Chapter 39 of the Harmonized Tariff Schedule of the United States (HTSUS). This is one of the methods that can be used to determine the properties of polymers and polymer products.

### 2 REFERENCES

***ASTM D 4603***
Test Method for Determining Inherent Viscosity of Poly(ethylene terephthalate) (PET)

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-18 Index

# ASTM D 644
# Test Method of Moisture Content of Paper and Paperboard by Oven Drying

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

This method provides for the determination of moisture content of paper and paperboard by oven drying combined with polymers and polymer products provided for in Chapter 39 of the Harmonized Tariff Schedule of the United States (HTSUS). This is one of the methods that can be used to determine the properties of polymers and polymer products.

### 2 REFERENCES

***ASTM D 644***
Test Method of Moisture Content of Paper and Paperboard by Oven Drying

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-19 Index

# ASTM D 882
# Test Method for Tensile Properties of Thin Plastic Sheeting

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

This method provides for the determination of the tensile properties of thin plastic sheeting of polymers and polymer products provided for in Chapter 39 of the Harmonized Tariff Schedule of the United States (HTSUS). This is one of the methods that can be used to determine the properties of polymers and polymer products.

### 2 REFERENCES

***ASTM D 882***
Test Method for Tensile Properties of Thin Plastic Sheeting

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-20 Index

# ASTM E 766
# Practice for Calibrating the Magnification of a Scanning Electron Microscope

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

This method provides for the practice for calibration of the magnification of a scanning electron microscope for analysis of polymers and polymer products provided for in Chapter 39 of the Harmonized Tariff Schedule of the United States (HTSUS). This method is also applicable to the analysis of other commodities covered in the HTSUS.

### 2 REFERENCES

***ASTM E 766***
Practice for Calibrating the Magnification of a Scanning Electron Microscope

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-21

Index

# ASTM E 986
# Practice for Scanning Electron Microscope Performance Characterization

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

This method provides for the practice for scanning electron microscope performance characterization for analysis of polymers and polymer products provided for in Chapter 39 of the Harmonized Tariff Schedule of the United States (HTSUS). This method has wider application to analysis of other commodities covered by the HTSUS and is to be used when applicable.

### 2 REFERENCES

***ASTM E 986***
Practice for Scanning Electron Microscope Performance Characterization

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-22 Index

# ASTM E 573
# Practices for Internal Reflection Spectroscopy

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

This method provides for the practice for internal reflection spectroscopy for analysis of polymers and polymer products provided for in Chapter 39 of the Harmonized Tariff Schedule of the United States (HTSUS). This method has wider application to analysis of other commodities covered by the HTSUS and is to be used when applicable.

### 2 REFERENCES

***ASTM E 573***
Practices for Internal Reflection Spectroscopy

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-23 Index

# ASTM D 5477
# Practice for Identification of Polymer Layers or Inclusions by Fourier Transform Infrared Spectroscopy (FT-IR)

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

This method provides for the practice for identification of polymer layers or inclusions by Fourier Transform Infrared Spectroscopy (FT-IR) for analysis of polymers and polymer products provided for in Chapter 39 of the Harmonized Tariff Schedule of the United States (HTSUS). This is one of the methods that can be used to determine the properties of polymers and polymer products.

This method also has wider application to analysis of other commodities covered by the HTSUS and is to be used when applicable.

### 2 REFERENCES

***ASTM D 5477***
Practices for Identification of Polymer Layers or Inclusions by Fourier Transform Infrared Spectroscopy (FT-IR)

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-24 Index

# ASTM E 1642
# Practice for General Techniques of Gas Chromatography Infrared (GC/IR) Analysis

**SAFETY PRECAUTIONS**

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

**1 SCOPE AND FIELD OF APPLICATION**

This practice covers techniques that are of general use in analyzing multi component samples, by using a combination of gas chromatography (GC) and infrared (IR) spectrophotometric techniques. The mixture is separated into its individual components by GC, and then these individual components are analyzed by IR.
This method can be used to analyze commodities covered in Chapter 39 of the Harmonized Tariff Schedule of the United States (HTSUS).

This technique has particular application to the analysis of hydrocarbon isomers which may come within the purview of Chapter 27 HTSUS rather than Chapter 29.

**2 REFERENCES**

***ASTM E 1642***
Practices for General Techniques of Gas Chromatography Infrared (GC/IR) Analysis

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-25 Index

# ASTM D 5226
# Practice for Dissolving Polymer Materials

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

This method provides for the practice for dissolving polymer materials of polymers and polymer products provided for in Chapter 39 of the Harmonized Tariff Schedule of the United States (HTSUS). This is one of the methods that can be used to determine the properties of polymers and polymer products.

### 2 REFERENCES

***ASTM D 5226***
Practice for Dissolving Polymer Materials

# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-26 INDEX

## Medical Devices: Patient Examination and Surgeons' Gloves; Adulteration

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

This citation provides the criteria for the testing of patient examination and surgeons' gloves.

### 2 REFERENCES

Medical Devices: Patient Examination and Surgoens' Gloves; Adulteration
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# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-27 INDEX

## Guidelines for the Identification of HTSUS Section VII Materials

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

This method is designed to aid in the identification of polymeric materials provided for in Chapters 39 and 40 of the Harmonized Tariff Schedule of the United States (HTSUS). The list of references is being provided as general guidance and should not be considered exhaustive.

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***The Sadtler Guide to the NMR Spectra of Polymers***
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CRC Press, Boca Raton, FL 1991

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# U.S. CUSTOMS LABORATORY METHODS

## USCL METHOD 39-28

Index

# ASTM D 1259
# Test Methods for Nonvoatile Content of Resin Solutions

### SAFETY PRECAUTIONS

*This method does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this method to establish appropriate safety and health pract ices and determine the applicability of regulatory limitations prior to its use.*

### 1 SCOPE AND FIELD OF APPLICATION

The quantitative analysis of polymers for the amount of volatile organic solvents in polymer solutions is necessary in the normal analysis of polymer solutions of Section Vll Chapters 39 and 40 of the Harmonized Tariff Schedule of the United States (HTSUS). In addition, there is a notation in Section Vl, Chapter 32, Subheading 3208 which refers to Note 4 of the HTSUS. This Note stipulates the amount of volatile organic solvent allowed to be present for consideration of the product in either Chapter 39 or Chapter 40.

### 2 REFERENCES

***ASTM D 1259***
Test Methods for Nonvolatile Content of Resin Solutions